

LHC Status, Interfaces, Upgrade

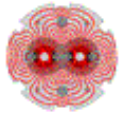


R. Ostojic, LARP, 16-18 September 2003

Civil Engineering

- All civil engineering for the machine finished.
- ATLAS cavern delivered.
- CMS has a problem with water leaks in the shaft. The repair is being coordination with CMS to minimise delays.

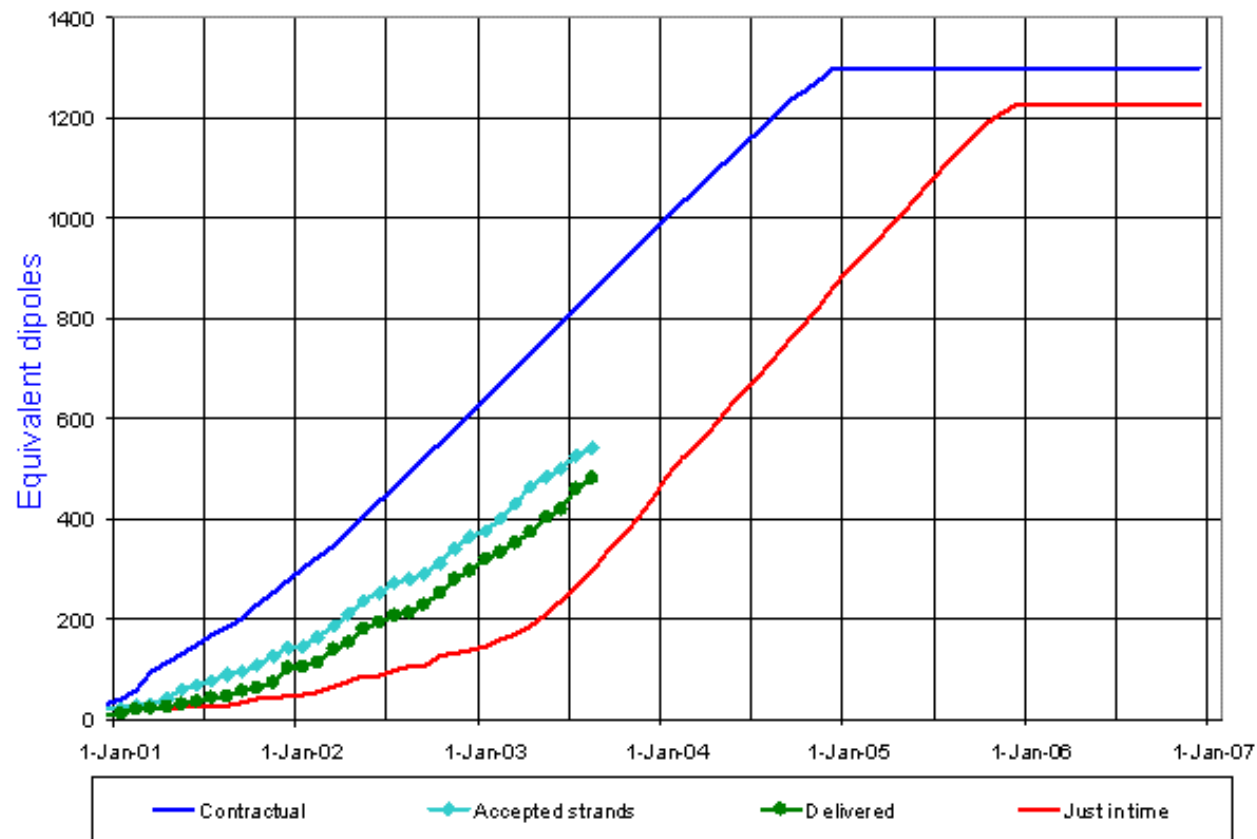
Superconducting Cables



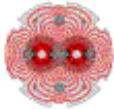
LHC Progress
Dashboard

Accelerator
Technology
Division

Superconducting cable 1



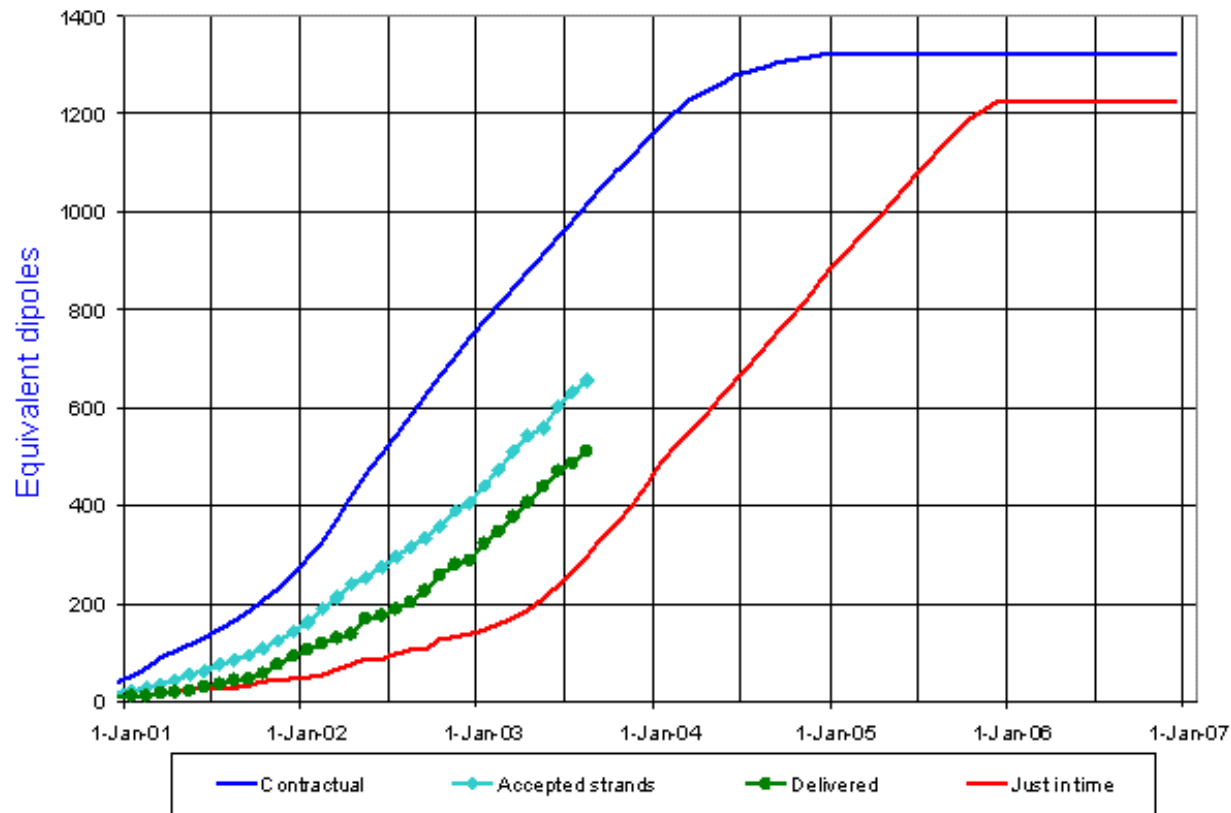
Superconducting Cables



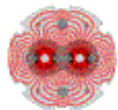
LHC Progress
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Superconducting cable 2



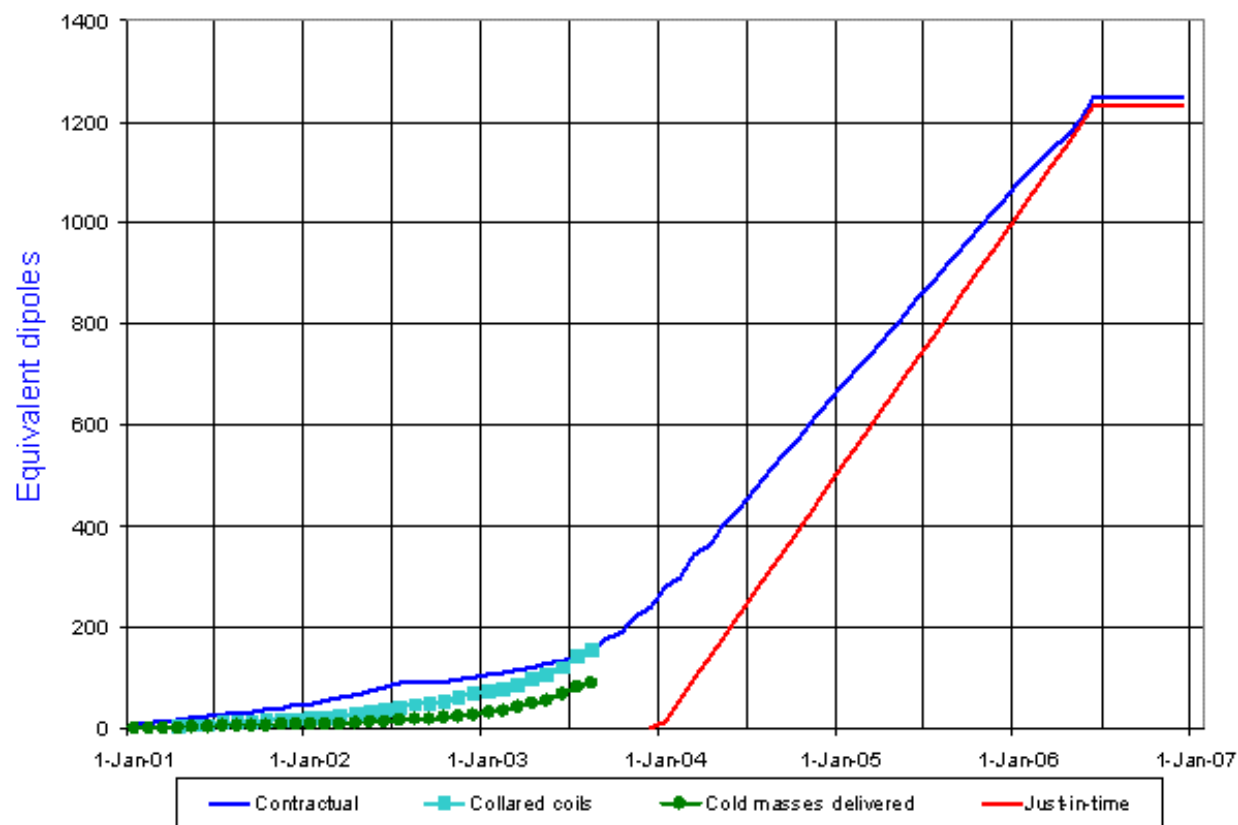
Dipole Cold Masses



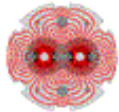
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Dipole cold masses



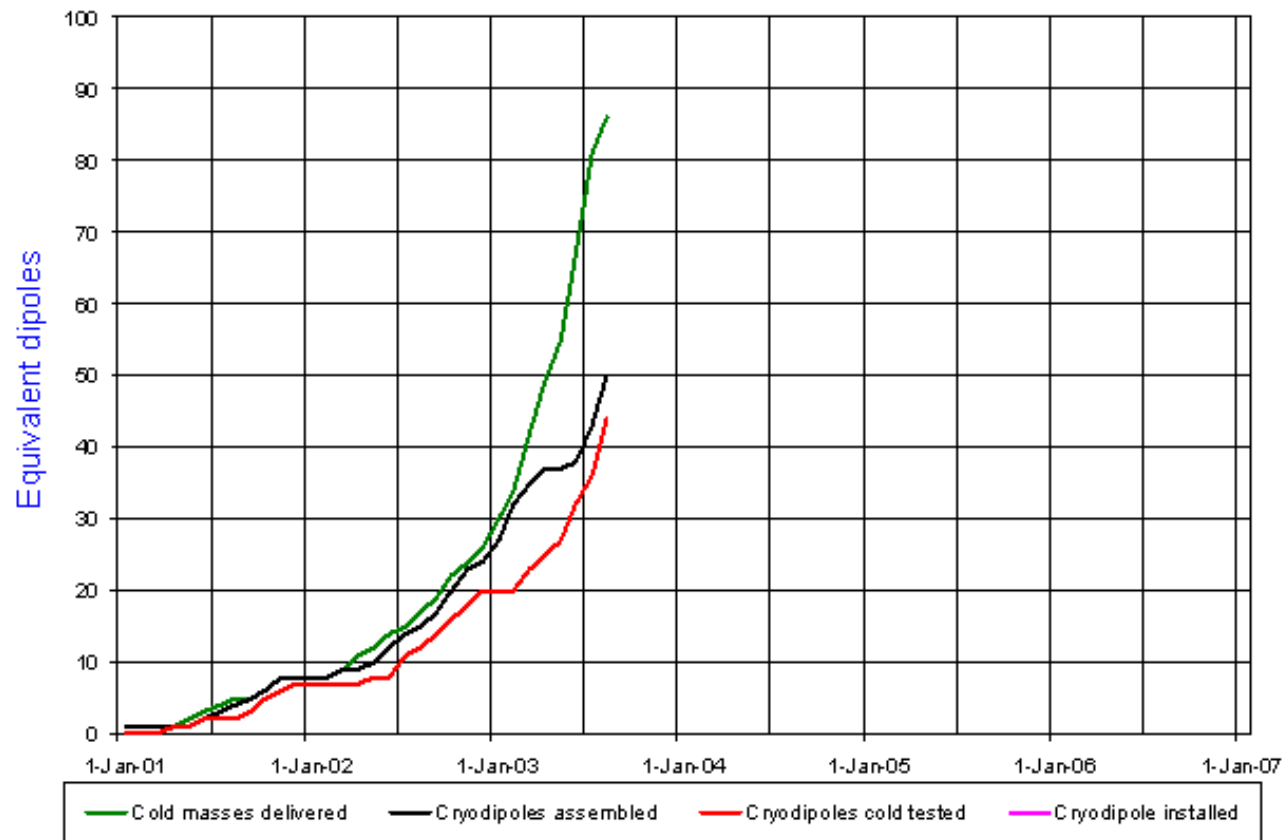
Cryodipole Overview



LHC Progress
Dashboard

Accelerator
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Division

Cryodipole overview



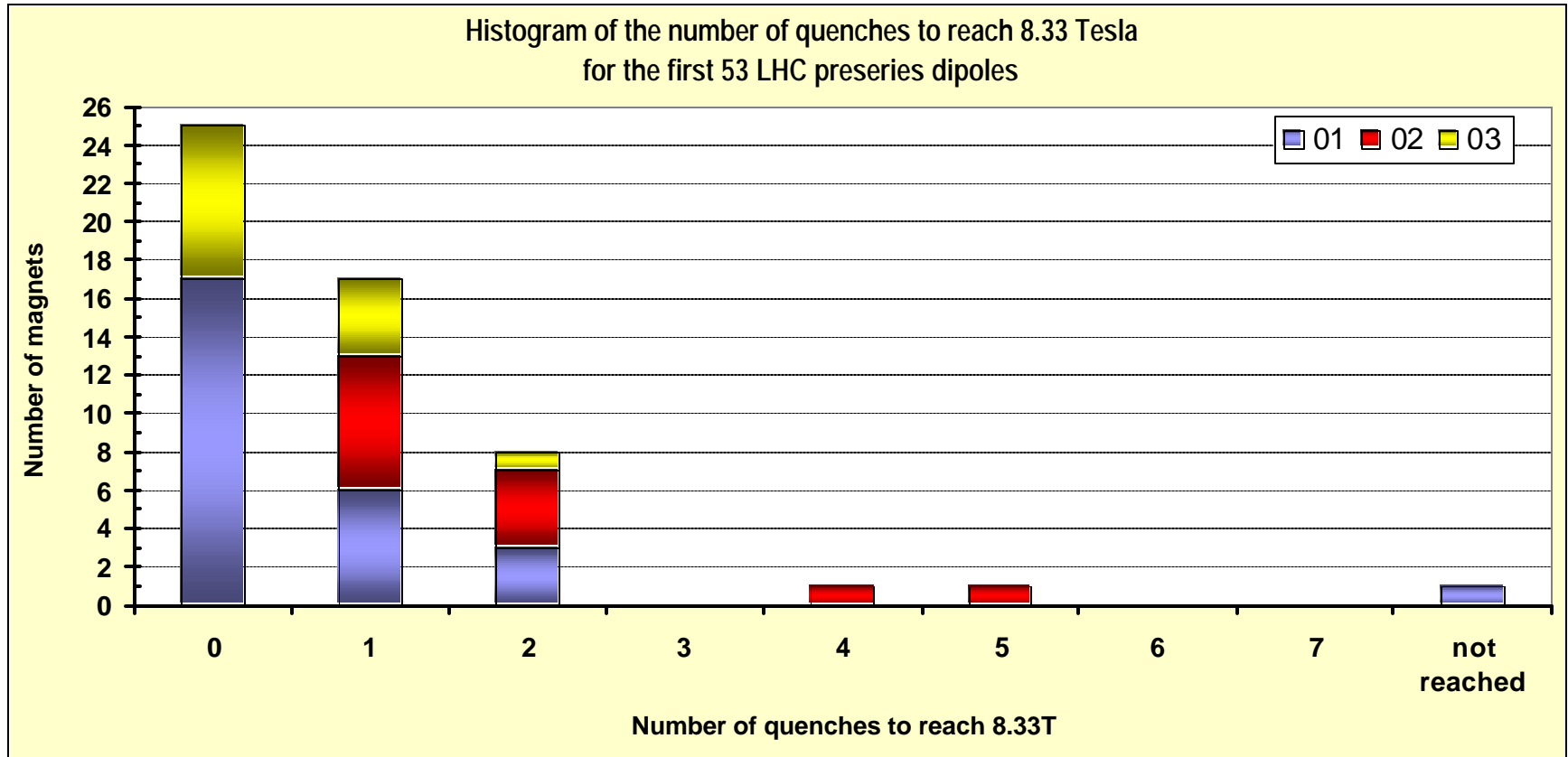
Cryostating and Testing



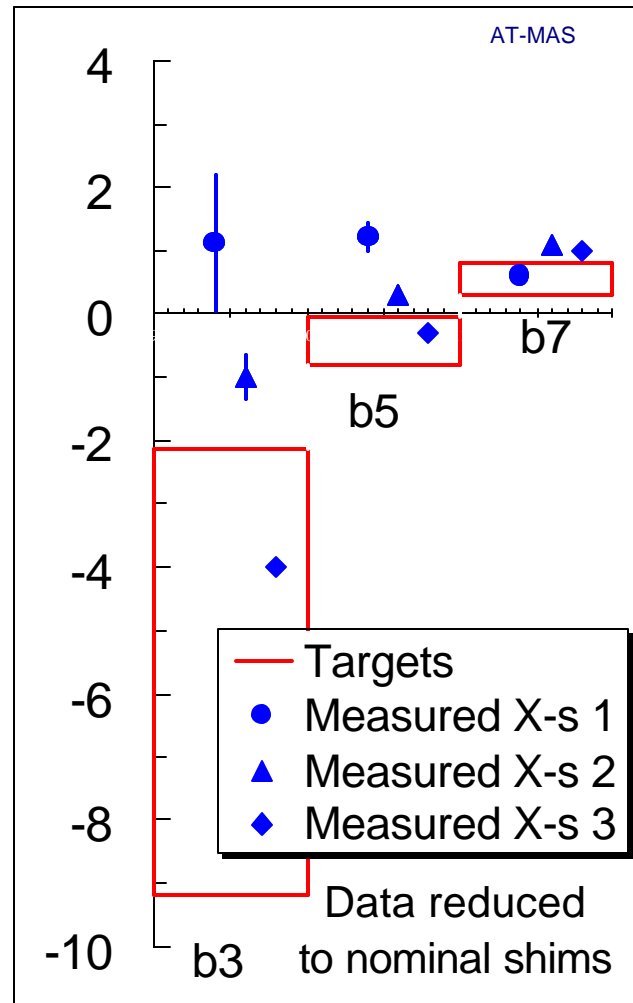
Cryomagnet Test Station (SM18)



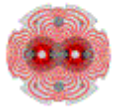
Cryodipole Quench Performance



Cryodipole Field Quality



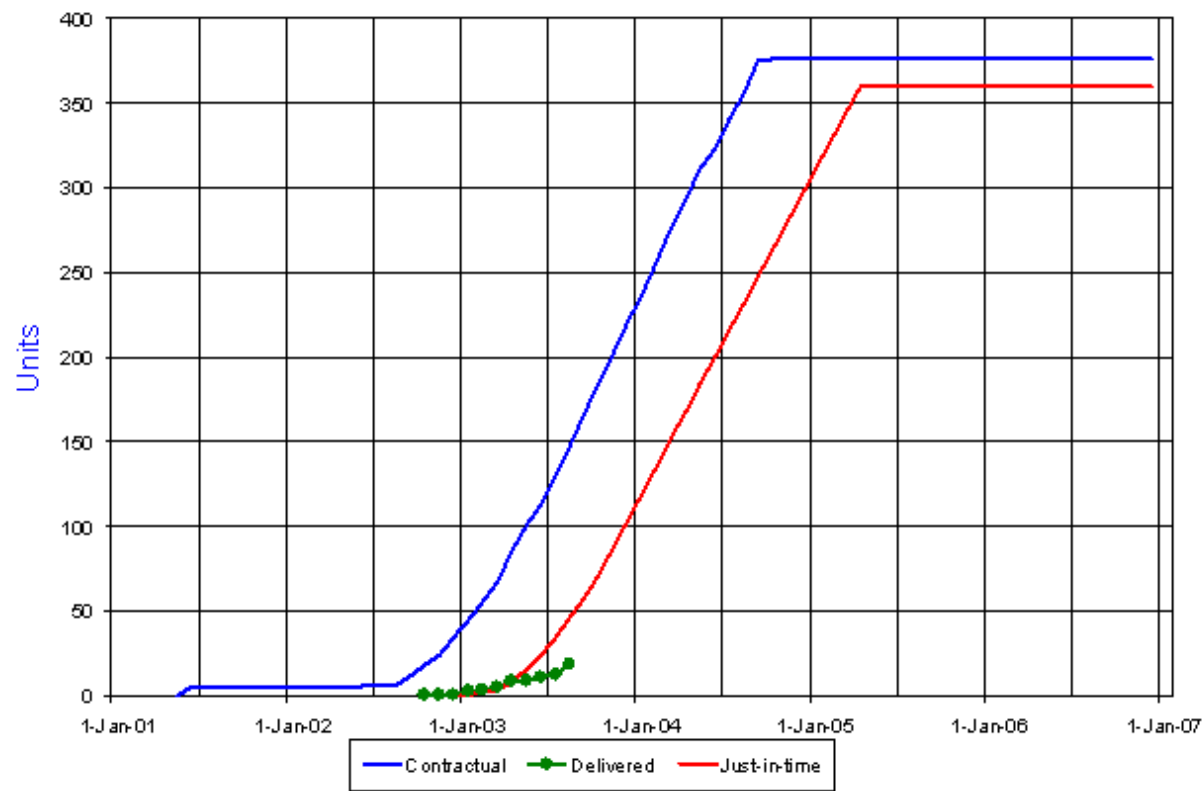
Correctors



LHC Progress
Dashboard



MSCB sextupole dipole correctors



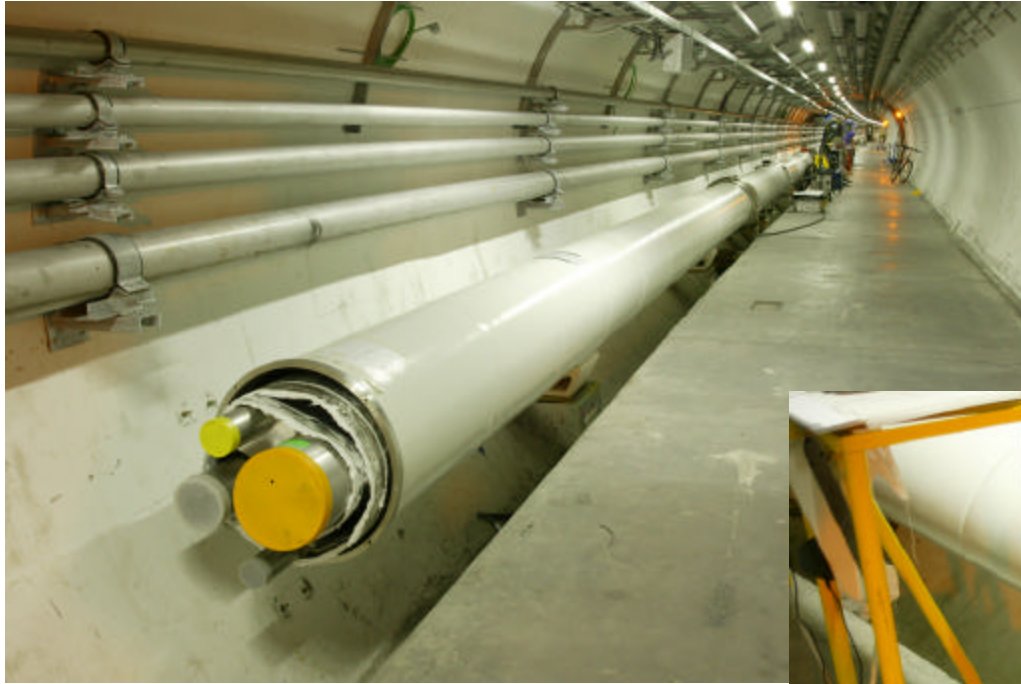
Updated 31 Aug 2003

Data provided by M. Karppinen AT-MEL

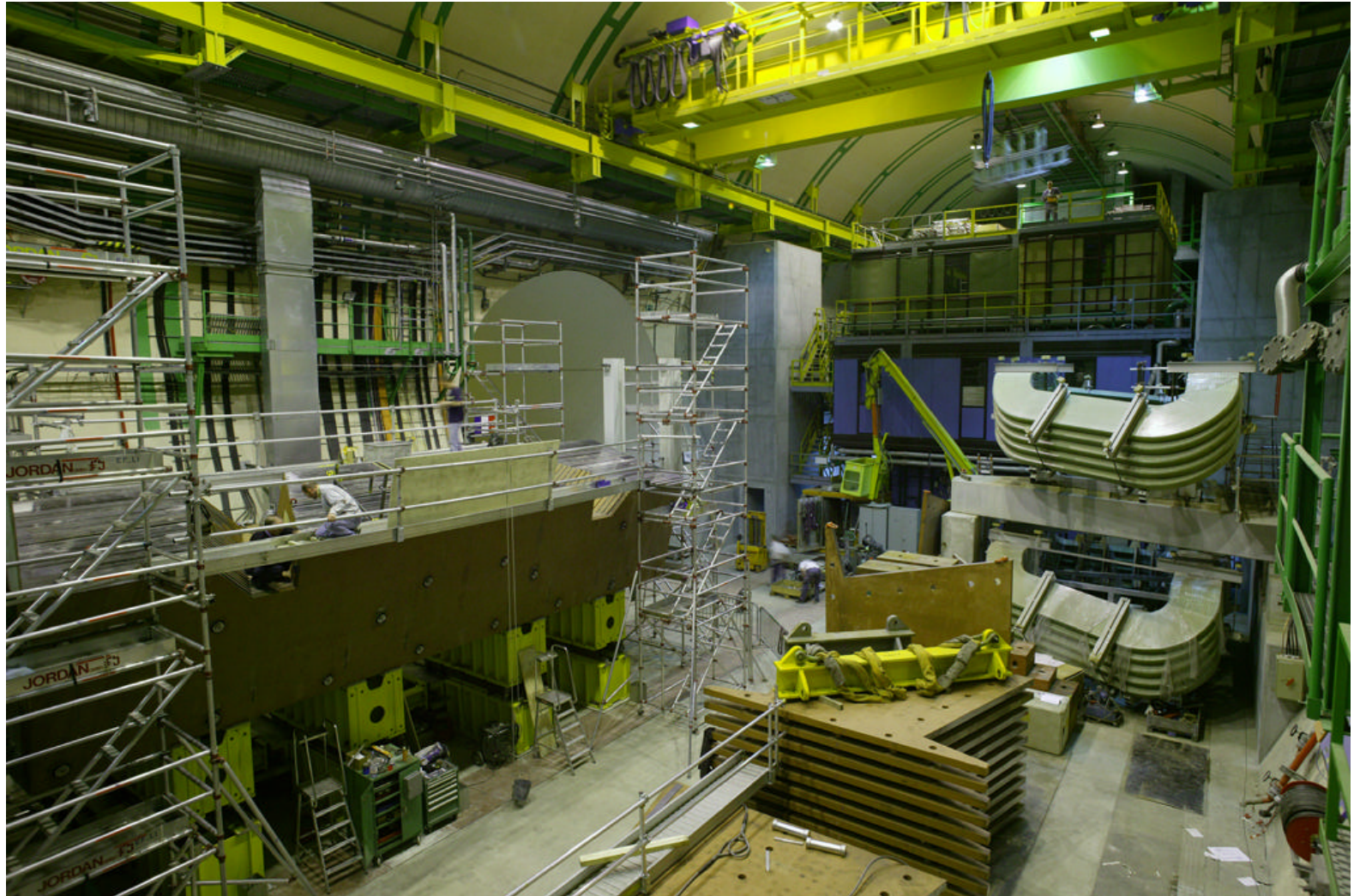
Tunnel Infrastructure in Sector 7-8



QRL Installation



LHCb Magnet



Coexistence of Cryogenics with LHCb

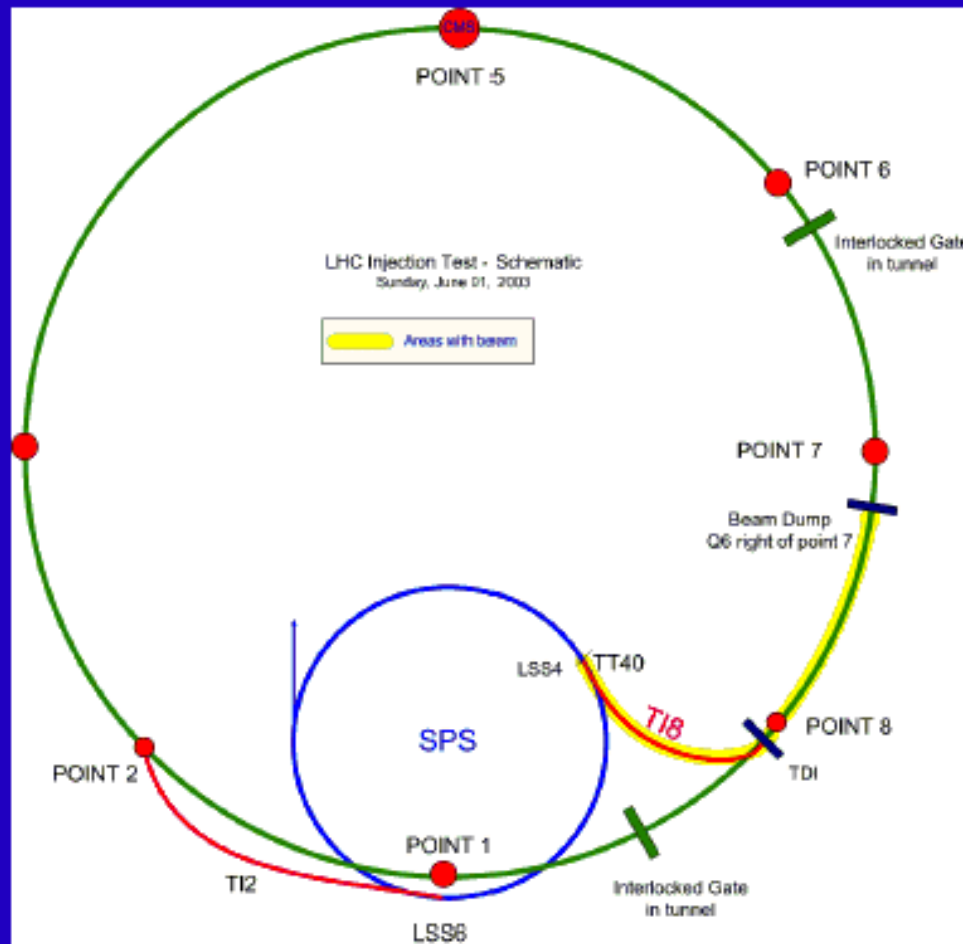


Schedule of Events

- First dipole in SMI2 September 2003
- First dipole in Sector 7-8 January 2004
- Commissioning of Sector 7-8 May 2005
- TI8 test with beam September 2004
- Injection test with beam April 2006
- TI2 commissioning April 2007
- LHC commissioning April 2007 onwards

Injection test in 2006

The installation schedule version 1.7 recently approved includes a 'possible injection test' - foreseen in April 2006

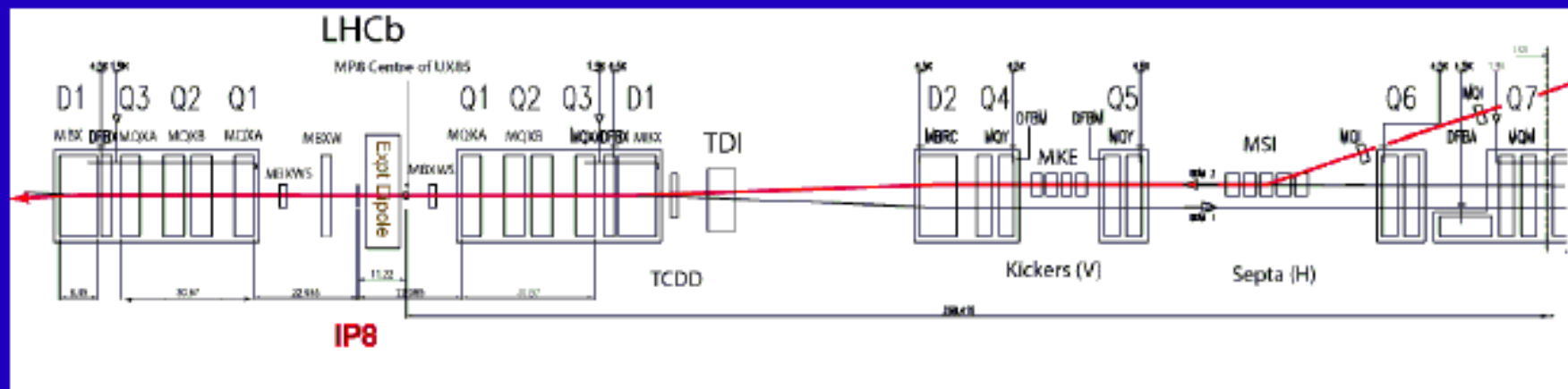


3.3 km of the LHC
including one
experiment insertion
and a full arc

About 30 cells with a
phase advance of ~
3000 degrees total.

Layout

Point 8



Point 7

